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**Geologic Application of
Thermal-inertia Mapping from Satellite**

**Type II Progress Report
September - November 1979**

(880-10050) GEOLOGIC APPLICATION OF
THERMAL-INERTIA MAPPING FROM SATELLITE
Progress Report, Sep. - Nov. 1979
(Geological Survey) 20 p HC A02/MF A01

N80-16398

Inclas
CSCL 08B G3/43 00050

Prepared for
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A. Problems

None

B. Accomplishments

The two USGS aircraft scenes which were processed to thermal-inertia images (Progress Reports March - May 1979 and June - August 1979) were concatenated into one image. A contrast stretch was applied to the resulting image to emphasize the thermal property differences. This product is now available to be compared with a thermal-inertia map produced from HCMM data when appropriate data are available. (See the data utility section.)

During this last reporting period, twelve CCT's were received. Each of the data sets have been reformatted to be compatible with the USGS computer. One 36 hour day/night pair of the Cabeza Prieta area appears to have stable meteorological conditions between acquisition times. The nighttime data is presently being registered to the daytime. The list of HCMM products received to date has been updated since the last reporting period.

C. Significant Results

None

D. Publications and Presentations

Ken Watson submitted an abstract for the International Geological Congress titled "Regional geologic analysis from HCMM thermal satellite data". "Ground support data July 10 to July 29, 1979, for the HCMM thermal satellite over the Powder River Basin, Wyoming" is in review to be published as a USGS open-file report.

E. Recommendations

None

F. Funds Expended

Total expenditures to date: \$81,838

G. Data Utility

For the Powder River Basin we have received two day/night pairs. The 30 July pair looks anomalous; GOES and NOAA-5 data for this same day confirms the presence of a thin cloud layer over the area. The 5 September data consists of a clear nighttime image and 50% cloud-covered daytime images. Neither of these two data sets are particularly acceptable. If a better day/night pair is not found, one of the above mentioned data sets will be used for the final analysis.

For the Cabeza Prieta site, three day/night pairs have been received: one 84 hour pair, one 60 hour pair, and one 36 hour pair. The 36 hour pair appears to be acceptable.

SITE: Wyoming - Powder River Basin

HCRM DATA PRODUCTS

DATE: May/June 1978

Date	Data	Product	Z Site Covered						Z Site Cloud Covered						DN Range			Ratings			Pairs?	Scene ID	Remarks	
Day	Day	Nite	B&W	IR	Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Set	Yes	No	AA Number
5/11	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0015-20220-1	RMS 277	
																							0015-20220-2	RMS 278
6/8	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13	130	x	x	x	x	0043-20450-1	NE section
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	5	139	x	x	x	x	0043-20450-2	-do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14	173	x	x	x	x	0043-20430-1	SW section
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	166	x	x	x	x	0043-20430-2	-do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	46	x	x	x	x	0043-09480-3	NW tip
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	6	65	x	x	x	x	0043-09490-3	SW tip, good image of Salt Lake
6/11	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	22	181	x	x	x	x	0046-20020-1	NE section
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1	111	x	x	x	x	0046-20020-1	-do-
6/12	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	20	121	x	x	x	x	0047-20190-1	SE corner
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	133	x	x	x	x	0047-20190-2	-do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14	172	x	x	x	x	0047-20200-1	Northern 75%
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	122	x	x	x	x	0047-20200-2	-do-
6/17	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	193	x	x	x	x	0052-20120-2	SE tip
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	131	x	x	x	x	0052-20130-1	SE section
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	19	172	x	x	x	x	0052-20130-2	-do-
6/18	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	146	x	x	x	x	0053-20310-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	183	x	x	x	x	0053-20310-2	
6/19	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	12	208	x	x	x	x	0054-20500-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	129	x	x	x	x	0054-20500-2	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	5	176	x	x	x	x	0054-20480-1	Salt Lake good
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	183	x	x	x	x	0054-20480-2	

SITE: Wyoming - Powder River Basin

HGMN DATA PRODUCTS

DATE: May/June 1978

Date	Data	Product	% Site Covered			% Cloud Covered			ON Range			Rating			Pairs?	Scene ID	Remarks					
			Day Vis	Nite Ir	IR	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Var	Sat	Yes	No
6/22	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	23	217	x	x	x	x	0057-20060-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7	156	x	x	x	x	0057-10060-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	63	x	x	x	x	0057-09110-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	57	x	x	x	x	0057-13100-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	12	209	x	x	x	x	0057-20080-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	122	x	x	x	x	0057-23080-2
6/28	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	20	199	x	x	x	x	0063-20170-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	153	x	x	x	x	0063-20170-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13	194	x	x	x	x	0063-40190-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13	148	x	x	x	x	0063-20190-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	10	66	x	x	x	x	0063-09220-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	61	x	x	x	x	0063-09230-3
6/29	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1	71	x	x	x	x	0064-09390-3
																						NN tip

REFLECTIVITY OF THE
ORIGINAL IMAGE IS POOR

SITE: Wyoming - Powder River Basin

HCOM DATA PRODUCTS

DATE: July 1976

Date	Data	Product	% Site Covered						% Site Cloud Covered			DN Range			Ratings			Fails?			Scene ID	AA Number	Remarks				
			Day	Nite	Vis	IR	BW	Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No	
7/2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7	133	x	x	x	x	x	x	x	0067-19540-2	NE corner	-do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15	168	x	x	x	x	x	x	x	0067-19540-1		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15	171	x	x	x	x	x	x	x	0067-19540-1		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	21	135	x	x	x	x	x	x	x	0067-19540-2		
7/8	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	202	x	x	x	x	x	x	x	0073-20050-1	SE corner	-do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	149	x	x	x	x	x	x	x	0073-20050-2		
7/9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	218	x	x	x	x	x	x	x	0074-20210-1		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	156	x	x	x	x	x	x	x	0074-20210-2		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	181	x	x	x	x	x	x	x	0074-20230-1		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	129	x	x	x	x	x	x	x	0074-20230-2		
7/13	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	146	x	x	x	x	x	x	x	0078-19570-1	NE corner	-do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13	131	x	x	x	x	x	x	x	0078-19570-2		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	64	x	x	x	x	x	x	x	0078-09020-3	NE quad	
7/18	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	11	192	x	x	x	x	x	x	x	0083-19570-1		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	151	x	x	x	x	x	x	x	0083-19570-2		
7/20	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	55	x	x	x	x	x	x	x	0085-09290-3	NW tip	Missing SE part
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15	217	x	x	x	x	x	x	x	0085-09310-3		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	157	x	x	x	x	x	x	x	0085-20260-1		
7/24	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	9	68	x	x	x	x	x	x	x	0089-09060-3	No western edge	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	24	54	x	x	x	x	x	x	x	0089-20010-1	Partial frame	-do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	32	169	x	x	x	x	x	x	x	0089-20010-2		
7/25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	64	x	x	x	x	x	x	x	0090-09230-3		
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	72	x	x	x	x	x	x	x	0090-09250-3	SW corner	
7/29	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	60	x	x	x	x	x	x	x	0094-08590-3		

SITE: Wyoming - Powder River Basin

LICM DATA PRODUCTS

Date: July 1978

Date	Data	Product	% Site Covered				% Site Cloud Covered			DN Range			Ratings			Pairs?	Scene ID	Remarks					
	Day Vis	Day Ir	Nite B&W	Nite Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No	AA Number
7/30	x	x	x	x	x							x	x	x	x	6	56	x	x	x	x	x	0095-09170-3
	x	x	x	x	x							x	x	x	x	12	209	x	x	x	x	x	0095-20110-1
	x	x	x	x	x							x	x	x	x	4	145	x	x	x	x	x	0095-20110-2
	x	x	x	x	x							x	x	x	x	12	172	x	x	x	x	x	0095-20130-1
	x	x	x	x	x							x	x	x	x	3	136	x	x	x	x	x	0095-20130-2
7/31	x	x	x	x	x							x	x	x	x	2	56	x	x	x	x	x	0096-09340-3
	x	x	x	x	x							x	x	x	x	10	210	x	x	x	x	x	0096-20300-1
	x	x	x	x	x							x	x	x	x	2	145	x	x	x	x	x	0096-20300-2

SITE: Wyoming - Powder River Basin

RCRN DATA PRODUCTS

DATE: August 1978

Date	Data	Product	% Site Covered			% Site Cloud Covered			DN Range			Ratings			Pairs?	Scene ID	Remarks						
			Day Vis	Nite Ir	IR	B&W Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes
8/3	x	x	x	x	x	x	x	x	x	x	x	x	x	2	59	x	x	x	x	x	x	x	0099-08510-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	2	58	x	x	x	x	x	x	x	0099-08530-3
8/4	x	x	x	x	x	x	x	x	x	x	x	x	x	22	61	x	x	x	x	x	x	x	0100-09090-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	3	63	x	x	x	x	x	x	x	0100-09110-3
8/5	x	x	x	x	x	x	x	x	x	x	x	x	x	13	61	x	x	x	x	x	x	x	0101-092270-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	16	79	x	x	x	x	x	x	x	0101-09280-3
8/6	x	x	x	x	x	x	x	x	x	x	x	x	x	4	157	x	x	x	x	x	x	x	0102-20420-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	10	211	x	x	x	x	x	x	x	0102-20400-1
8/10	x	x	x	x	x	x	x	x	x	x	x	x	x	2	175	x	x	x	x	x	x	x	0102-20400-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	3	76	x	x	x	x	x	x	x	0106-09210-3
8/15	x	x	x	x	x	x	x	x	x	x	x	x	x	1	45	x	x	x	x	x	x	x	0111-09120-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	1	51	x	x	x	x	x	x	x	0111-05140-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	15	172	x	x	x	x	x	x	x	0111-20080-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	6	154	x	x	x	x	x	x	x	0111-20080-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	11	155	x	x	x	x	x	x	x	0111-20390-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	5	121	x	x	x	x	x	x	x	0111-20090-2
8/16	x	x	x	x	x	x	x	x	x	x	x	x	x	14	191	x	x	x	x	x	x	x	0112-20260-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	2	156	x	x	x	x	x	x	x	0112-20260-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	2	57	x	x	x	x	x	x	x	0112-09300-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	10	183	x	x	x	x	x	x	x	0102-20420-1

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

SITE: Wyoming - Powder River Basin

HCMN DATA PRODUCTS

DATE: August 1978

Date	Data	Product	% Site Covered										% Site Cloud Covered			DN Range		Ratings			Pairs?	Scene ID	Remarks	
			Day Vis	Day Ir	Nite IR	B&W Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No
8/19	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	61	x	x	x	0115-08470-3	Barely gets the E edge
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	58	x	x	x	0115-08480-3	Only gets the SE tip
8/20	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	5	64	x	x	x	0116-09050-3	Good image
8/21	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3	66	x	x	x	0117-09230-3	Good data
8/22	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	11	187	x	x	x	0117-20180-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	161	x	x	x	0117-20180-2	
8/25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	9	159	x	x	x	0117-20200-1	Good data
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	5	142	x	x	x	0117-20200-2	-do-
8/27	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13	204	x	x	x	0118-20360-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	139	x	x	x	0118-20360-2	
8/28	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15	203	x	x	x	0118-20380-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	120	x	x	x	0118-20380-2	
8/29	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	224	x	x	x	0121-19550-1	Data not cloud covered, had noise problems -do-
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7	189	x	x	x	0121-19550-2	
8/30	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	74	x	x	x	0121-08590-3	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	187	x	x	x	0121-19540-1	
8/31	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	135	x	x	x	0121-19540-2	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	15	191	x	x	x	0127-20060-2	
8/31	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16	170	x	x	x	0127-20060-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	125	x	x	x	0127-20070-2	No. border -do-

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

SITE: Wyoming - Powder River Basin

ECON DATA PRODUCTS

DATE: August 1978

Date	Data	Product	X Site Covered	Z Site Cloud Covered	DN Range	Ratings	Pairs?	Scene ID	Remarks
Day Vis	Day IR	Nite IR	BEV Trans	CCT	<10 10 25 50 75 100 <10 30 60 90 Low	High	Unsat Mar Sat	Yes No	AA Number
8/19	x	x	x	x	x	4 61	x	0115-08470-3	Barely gets the E edge Only gets the SE tip
8/20	x	x	x	x	x	2 58	x	x	0115-08480-3
8/21	x	x	x	x	x	5 64	x	0116-09050-3	Good image
8/22	x	x	x	x	x	16 155	x	0116-20010-1	
8/23	x	x	x	x	x	8 155	x	0116-20010-2	
8/24	x	x	x	x	x	14 154	x	0116-20020-1	
8/25	x	x	x	x	x	3 148	x	0116-20020-2	
8/26									
8/27	x	x	x	x	x	11 187	x	x	0117-20180-1
8/28	x	x	x	x	x	2 161	x	x	0117-20180-2
8/29	x	x	x	x	x	9 159	x	x	0117-20200-1
8/30	x	x	x	x	x	5 142	x	x	0117-20200-2
8/31	x	x	x	x	x	13 204	x	x	0118-20360-1
9/1	x	x	x	x	x	2 139	x	x	0118-20360-2
9/2	x	x	x	x	x	15 203	x	x	0118-20380-1
9/3	x	x	x	x	x	2 120	x	x	0118-20380-2
9/4									
9/5	x	x	x	x	x	2 224	x	x	0121-1955-0-1
9/6	x	x	x	x	x	7 189	x	x	0121-1955-0-2
9/7	x	x	x	x	x	2 74	x	x	0121-08590-3
9/8	x	x	x	x	x	16 187	x	x	0121-19540-1
9/9	x	x	x	x	x	2 135	x	x	0121-19540-2
9/10	x	x	x	x	x	2 138	x	x	0127-20060-2
9/11	x	x	x	x	x	15 191	x	x	0127-20060-1
9/12	x	x	x	x	x	16 170	x	x	0127-20070-1
9/13	x	x	x	x	x	2 125	x	x	0127-20070-2

SITE: Wyoming - Powder River Basin

HCM4 DATA PRODUCTS

DATE: September 1978

Date	Data	Product	% Site Covered						% Site Cloud Cover'd			DN Range			Ratings	Pairs?	Scene ID	Remarks						
	Day Vis	Nite Tr	Day Vis	Nite IR	B&W Trans	CCF	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No	AA Number
9/4	x	x	x	x									x	2	107	x	x	x	x	x	x	x	0131-08460-3	
	x	x	x	x									x	2	82	x	x	x	x	x	x	x	0131-08470-3	
9/5	x	x	x	x	x	x	x	x	x	x	x	x	x	3	71	x	x	x	x	x	x	x	0132-09030-3	
	x	x	x	x	x	x	x	x	x	x	x	x	x	15	72	x	x	x	x	x	x	x	0132-09050-3	
	x	x	x	x	x	x	x	x	x	x	x	x	x	26	49	x	x	x	x	x	x	x	0132-19590-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	23	153	x	x	x	x	x	x	x	0132-19590-2	
	x	x	x	x	x	x	x	x	x	x	x	x	x	13	152	x	x	x	x	x	x	x	0132-20010-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	2	145	x	x	x	x	x	x	x	0132-20010-2	
9/6	x	x	x	x	x	x	x	x	x	x	x	x	x	2	74	x	x	x	x	x	x	x	0133-09220-3	
	x	x	x	x	x	x	x	x	x	x	x	x	x	3	72	x	x	x	x	x	x	x	0133-09230-3	
9/10	x	x	x	x	x	x	x	x	x	x	x	x	x	12	137	x	x	x	x	x	x	x	0137-19530-2	
	x	x	x	x	x	x	x	x	x	x	x	x	x	14	168	x	x	x	x	x	x	x	0137-19530-1	
9/17	x	x	x	x	x	x	x	x	x	x	x	x	x	2	39	x	x	x	x	x	x	x	0144-09270-3	
	x	x	x	x	x	x	x	x	x	x	x	x	x	2	50	x	x	x	x	x	x	x	0144-09290-3	
9/26	x	x	x	x	x	x	x	x	x	x	x	x	x	1	24	x	x	x	x	x	x	x	0153-08560-3	
	x	x	x	x	x	x	x	x	x	x	x	x	x	1	26	x	x	x	x	x	x	x	0153-08580-3	
	x	x	x	x	x	x	x	x	x	x	x	x	x	15	77	x	x	x	x	x	x	x	0153-19530-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	1	129	x	x	x	x	x	x	x	0153-19530-2	
	x	x	x	x	x	x	x	x	x	x	x	x	x	10	96	x	x	x	x	x	x	x	0153-19540-1	
	x	x	x	x	x	x	x	x	x	x	x	x	x	1	133	x	x	x	x	x	x	x	0153-19540-2	

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

SITE: Wyoming - Powder River Basin

RCM4 DATA PRODUCTS

Date	Product						% Site Covered						% Site Covered						DN Range						Ratings						Printed?		Scene ID		Remarks	
	Day Vis	Day Ir	Nite Ir	IR	BRW	Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No	All Number											
9/27	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	10	41	x	x	x	0154-09140-3	No. border											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	12	43	x	x	x	0154-09160-3	Very Good,											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	39	x	x	x	0154-20190-1	IRS 281											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	41	66	x	x	x	0154-20190-2	Sc. edge											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	25	x	x	x	0154-20110-1	-do-											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	39	64	x	x	x	0154-20110-2	RMS 283											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0154-20110-3	RMS 283, scene											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0154-20120-1	mislabeled,											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0154-20120-2	is over ocean											
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0154-20130-1												
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0154-20130-2												
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0154-20140-1												
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0154-20140-2												

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

SITE: Wyoming - Powder River Basin

HCRN DATA PRODUCTS

DATE: October 1978

Date	Data	Product	Z Site Covered		DN Range		Ratings		Pairs?	Scene ID	Remarks													
			Day	Nite	Day	Nite	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No
10/3	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0160-09260-3 0160-09280-3
10/6	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0160-09260-3 0160-09280-3
10/7	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0163-08430-3 SE tip
10/12	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0164-12570-1 0164-12570-2 -do-
10/13	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0169-19510-1 C159-19510-2
10/19	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0170-20080-1 0170-20080-2 0170-20090-1 0170-20090-2
10/23	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0176-09230-3 NW corner 0176-09250-3 SW corner
10/24	x	x	x	x	x	x								x	x	x	x	x	x	x	x	x	x	0180-19540-1 Large data dropout in No. half, missing western part -do-

SITE: Wyoming - Powder River Basin

HCMW DATA PRODUCTS

DATE: October 1978

SITE: Wyoming - Powder River Basin

HCRN DATA PRODUCTS

DATE: November 1978

Date	Data	Product	% Site Covered	% Site Covered	Cloud Covered	DN Range	Ratings	Pairs?	Scene ID	Remarks
Day Vis	Day Ir	Nite IR	B&W Trans	CCT	<10 10 25 50 75 100	<10 30 60 90	Low High Unsat	Mar Sat Yes No	AA Number	
11/3	x	x x	x	x		2 37	x	x	0191-09010-3	
11/14	x	x x	x x	x	x	2 7	x	x	0202-09150-3	Image entirely black, may be snow cov.-red
	x x	x x	x x	x	x	15 119	x	x	0202-20000-1	Only water visible, rest of image black
	x x	x x	x x	x	x	3 33	x	x	0202-20000-2	So. border
	x x	x x	x x	x	x	14 92	x	x	0202-20120-1	-do-
	x x	x x	x x	x	x	14 92	x	x	0202-20020-1	May be snow covered?
	x x	x x	x x	x	x	3 25	x	x	0202-20020-2	Snow
	x x	x x	x x	x	x	15 119	x	x	0202-26000-1	
	x x	x x	x x	x	x	3 32	x	x	0202-23000-2	
11/15	x	x x	x	x	x	8 94	x	x	0203-20200-1	NW portion, looks like snow
	x x	x x	x x	x	x	2 27	x	x	0203-20200-2	-do-
	x x	x x	x x	x	x	3 8	x	x	0203-09230-3	
	x x	x x	x x	x	x	3 23	x	x	0203-09230-3	
11/23	x	x x	x	x	x	2 10	x	x	0211-08340-3	NE tip, very cold?
	x x	x x	x x	x	x	2 15	x	x	0211-08360-3	SE tip, very cold?
	x x	x x	x x	x	x				0211-08360-3	
11/24	x	x x	x x	x	x	2 10	x	x	0212-08530-3	Very cold?
	x x	x x	x x	x	x	2 10	x	x	0212-08550-3	-do-
11/25	x	x x	x x	x	x	2 14	x	x	0213-09110-3	Very cold?
11/29	x	x x	x x	x x	x	22 95	x	x	0217-19430-1	
					x	5 44	x	x	0217-19430-2	

REPORTABILITY OF THE
ORIGINAL PRODUCTS POOR

SITE: Wyoming - Powder River Basin

HCMN DATA PRODUCTS

DATE: April 1979

Date	Data	Product	% Site Covered						% Site Cloud Covered			DN Range			Ratings			Pairs?	Scene ID	Remarks				
			Day Vis	Day Ir	Nite B&W	Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No
4/1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	48	175	x	x	x	x	0340-19310-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	121	x	x	x	x	0340-19310-2
4/2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	37	149	x	x	x	x	0340-19330-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	118	x	x	x	x	0340-19330-2
4/17	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	21	166	x	x	x	x	0341-19290-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	66	x	x	x	x	0341-19290-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	169	x	x	x	x	0341-08550-3
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	21	182	x	x	x	x	0356-19290-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	111	x	x	x	x	0356-19290-2
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17	161	x	x	x	x	0356-19310-1
	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2	99	x	x	x	x	0356-19310-2

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

SITE: Arizona - Cabeza Prieta

HCM DATA PRODUCTS

DATE: May - August 1978

Date	Data	Product	% Site Covered	% Site Cloud Covered	DN Range	Ratings	Prints?	Scene ID	Remarks
Day Vis	Day Ir	Nite B&W Trans CCT	<10 10 25 50 75 100	<10 30 60 90	Low High	Unsat Mar Sat	Yes No	AA Number	
5/30	x	x x	x	x			x	0034-21130-1	Received day IR CCT; data too garbled to use. NASA says data not recoverable. RMS 280.
6/21	x	x x	x	x			x	0056-21220-1	
8/2	x	x x	x	x	x 7 208	x	x	0098-21030-1	
			x	x	x 2 136	x	x	0098-21030-2	
8/5	x	x x	x	x	x 3 89	x	x	0101-09300-3	
			x	x	x 2 74	x	x	0101-09320-3	
8/6	x	x x	x	x	x 13 202	x	x	0102-20380-1	
			x	x	x 5 178	x	x	0102-20380-2	
8/7	x	x x	x	x	x 8 156	x	x	0103-20550-1	RMS 282. Lower 25% of site -do-
			x	x	x 1 155	x	x	0103-20550-2	
	x	x x	x	x	x 24 183	x	x	0103-20570-1	RMS 282. Upper 75% of site -do-
			x	x	x 1 175	x	x	0103-20570-2	
8/8	x	x x	x	x	x 5 172	x	x	0104-21140-1	
			x	x	x 9 182	x	x	0104-21140-2	
8/10	x	x x	x	x	x 2 82	x	x	0106-09230-3	
8/16	x	x x	x	x	x 28 92	x	x	0112-09340-3	Good Image

REPRODUCIBILITY OF THE
ORIGINAL IS POOR

SITE: Arizona - Cabeza Prieta

HCMM DATA PRODUCTS

DATE: May - August 1978

Date	Data	Product	% Site Covered			% Site Cloud Covered			DN Range			Ratings			Pairs?	Scene ID	Remarks						
Day	Day	Nite	B&W	Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No	AA Number
8/17	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14	194	x	x	x	0113-20420-1	Eastern half	
																7	157	x	x	x	x	0113-20420-2	"do"
																3	90	x	x	x	x	0113-09520-3	Ground track must have been off to get this. It isn't Aug. 17!
8/18	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7	212	x	x	x	x	0014-20590-1	
8/19	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13	183	x	x	x	x	0014-20590-2	
8/21	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	5	141	x	x	x	x	0115-21170-1	
8/22	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	45	174	x	x	x	x	0115-21170-2	
8/24	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	31	89	x	x	x	x	0118-09450-3	Good data
																24	158	x	x	x	x	0119-20520-2	Image bright
																17	211	x	x	x	x	0119-20520-1	Good data
8/28	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4	97	x	x	x	x	0120-21100-1	
																41	162	x	x	x	x	0120-21100-2	
																8	180	x	x	x	x	0124-20460-1	
																5	188	x	x	x	x	0124-20460-2	

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

SITE: Arizona - Cabeza Prieta

HCRH DATA PRODUCTS

DATE: September 1978

Date	Data	Product	% Site Covered	% Site Cloud Covered	DN Range	Ratings	Fault?	Scene ID	Remarks															
Day	Day	Nite	IR	B ^r V	Trans	CCT	<10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No	AA Number
9/2	x	x	x	x	x	x	x	x	x	x	x	x	2	160	x	x	0129-20400-2							
	x	x	x	x	x	x	x	x	x	x	x	x	12	212	x	x	0129-20400-1							
	x	x	x	x	x	x	x	x	x	x	x	x	45	86	x	x	0129-09510-3							
9/3	x	x	x	x	x	x	x	x	x	x	x	x	9	87	x	x	0129-09490-3							
	x	x	x	x	x	x	x	x	x	x	x	x	8	182	x	x	0130-20570-1	Puffy clouds may be 20%	-do-					
	x	x	x	x	x	x	x	x	x	x	x	x	1	143	x	x	0130-20570-2							
9/6	x	x	x	x	x	x	x	x	x	x	x	x	10	80	x	x	0133-09250-3							
	x	x	x	x	x	x	x	x	x	x	x	x	3	88	x	x	0133-09270-3							
9/13	x	x	x	x	x	x	x	x	x	x	x	x	11	182	x	x	0140-20450-1							
	x	x	x	x	x	x	x	x	x	x	x	x	7	147	x	x	0140-20450-2							
9/14	x	x	x	x	x	x	x	x	x	x	x	x	4	161	x	x	0141-21030-1	So. portion						
	x	x	x	x	x	x	x	x	x	x	x	x	31	144	x	x	0141-21030-2	-do-						
	x	x	x	x	x	x	x	x	x	x	x	x	9	195	x	x	0141-21030-1	NW tip						
9/17	x	x	x	x	x	x	x	x	x	x	x	x	2	131	x	x	0141-21050-2	-do-						
	x	x	x	x	x	x	x	x	x	x	x	x	2	74	x	x	0144-09300-3							
9/18	x	x	x	x	x	x	x	x	x	x	x	x	1	66	x	x	0145-09450-3	NW tip						
	x	x	x	x	x	x	x	x	x	x	x	x	39	68	x	x	0145-09500-3	SW tip						
	x	x	x	x	x	x	x	x	x	x	x	x	11	113	x	x	0145-20300-1	Eastern 75%						
9/27	x	x	x	x	x	x	x	x	x	x	x	x	4	150	x	x	0145-20390-2	-do-						
	x	x	x	x	x	x	x	x	x	x	x	x	25	82	x	x	0154-09150-3	Eastern 75%						
9/30	x	x	x	x	x	x	x	x	x	x	x	x	3	165	x	x	0157-21020-1	Western 75%						
	x	x	x	x	x	x	x	x	x	x	x	x	3	158	x	x	0157-21040-2	-do-						

SITE: Arizona - Cabeza Prieta

HCMN DATA PRODUCTS

DATE: March/April 1979

Date	Data	Product	% Site Covered						% Site Cloud Covered			DN Range			Ratings			Pairs?	Scene ID	Remarks			
			Day Vis	Day Ir	Nite IR	B&W Trans	CCT <10	10	25	50	75	100	<10	30	60	90	Low	High	Unsat	Mar	Sat	Yes	No
3/31	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0339-20470-1	SW tip, clear over Salton Sea -do-
4/2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0339-20470-2	0341-08570-3
4/3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0342-09150-3	Clear over site
4/4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0343-20230-1	Excellent
4/15	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0343-20230-2	Excellent
																						0354-20270-1	
																						0354-20270-2	